

Serial No. 10/099,009

-7-

PU000173

REMARKS

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clatanoff et al. (US 6,052,491; refer to as Clatanoff herein) in view of McKnight et al. (US 6,373, 497; refer to as McKnight herein). 3. Regarding claim 32, the office action states Clatanoff discloses method for contour diffusion comprising, in relevant part:

"A dithering unit coupled to said system to reduce the number of said repeated displayed pixel brightness levels corresponding to different intended pixel brightness levels"

Applicant has amended claim 32 to recite, in relevant part,

"...a dithering unit applying at least a **table dither** and an **input dither** to reduce the number of said repeated displayed pixel brightness levels corresponding to different intended pixel brightness levels."

Applicant defines the terms "table dither" and "input dither" in applicant's specification, for example, in paragraph 22, wherein is stated:

"In each of columns B and C, the brightness increases going down each column. Column D represents gamma correction values resulting from a single dither applied to the values of column C. This single dither can be referred to as a table dither. Column E represents equivalent average brightness that would be produced by a positive only gamma table if the positive and negative tables are implemented as in columns B and D respectively. Column F represents equivalent average brightness values similar to column E, with the noted exception that a second dither has been applied to the input signal. This second dither can be referred to as an input dither, to distinguish it from the table dither. Taken together, the table dither and the input dither are a multiple dither."

Serial No. 10/099,009

-8-

PU000173

The office action cites lines 5-41 of column 3, lines 7-17 of column 4, lines 8-19 and 51-59 of column 5 and lines 4-43 of column 6 and Fig. 13-14 of Claytonoff as disclosing the dithering unit.

Claytonoff, lines 5-41 of column 3, discloses only using look up tables to convert an input data word to an output data word. The tables " contain different data in each case where an input word that does not correspond exactly to an output word. " There is no disclosure in the cited text of Claytonoff of a multiple dither comprising an input dither and a table dither.

Lines 7-17 of column 4 of Claytonoff discloses only that "data translation can create false image contours occurs when a non-CRT based display system processes a brightness component of an input image signal which has been generated for display on a CRT-based display system. This form of compensation is called gamma correction or gamma compensation, or degamma correction or degamma correction. " The cited text contains no teaching or suggestion of "a multiple dither comprising an input dither and a table dither" as recited in applicant's claim.

Clatonoff, lines 8-19 of column 5, describe generally the problem of quantization error and do not disclose or suggest any dithering. The cited text contains no teaching or suggestion of "a multiple dither comprising an input dither and a table dither" as recited in applicant's claim.

The cited lines 51-59 of column 5 of Clatanoff disclose only a "temporal dithering of the translation function and error diffusion." Temporal dithering involves changing, usually by a random process, the translation function that processes the data. The cited text contains no teaching or suggestion of "a multiple dither comprising an input dither and a table dither" as recited in applicant's claim.

Serial No. 10/099,009

-9-

PU000173

The office action notes that input values of pixels with same output level are dithered to produce more accurate output; and while claim recites dithering unit, it is clear the dithering is performed by the system which correspond to a dithering unit. Therefore applicant has amended claim 32 to clarify this issue.

With regard to claim 19, applicant has amended the claim to recite, in relevant part: "reducing the number of said pixels having repeated brightness levels in successive pictures without changing said table resolution by applying steps of table dithering and input dithering."

As discussed above, neither Clatonoff, nor any of the other cited references discloses steps of table dithering and input dithering. Accordingly, Applicants respectfully request the withdrawal of the rejections and allowance of the claims as amended herein.

Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would clarify any issues raised herein.

Respectfully submitted,



Christine Johnson  
Registration No. 38,507  
609-734-6892

Date: September 10, 2004

Patent Operation  
Thomson Licensing, Inc.  
P. O. Box 5312  
Princeton, NJ 08543-5312